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Working with interpreters: the challenges of introducing Option Grid™ patient decision aids

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Abstract

Objective

We aimed to observe how an Option Grid™ decision aid for clinical encounters might be used where an interpreter is present, and to assess the impact of its use on shared decision making.

Methods

Data were available from three clinical consultations between patient, clinician (a physiotherapist), and interpreter about knee osteoarthritis. Clinicians were trained in the use of an Option Grid decision aid and the tool was used. Consultations were audio-recorded, transcribed, and translated by independent translators into English.

Results

Analysis revealed the difficulties with introducing a written decision aid into an interpreted consultation. The extra discussion needed between the clinician and interpreter around the principles and purpose of shared decision making and instructions regarding the Option Grid decision aid proved challenging and difficult to manage. Discussion of treatment options while using an Option Grid decision aid was predominantly done between clinician and interpreter. The patient appeared to have little involvement in discussion of treatment options.

Conclusion

Patients were not active participants within the discussion. Further work needs to be done on how shared decision making can be achieved within interpreted consultations.

Practice Implications

Option Grid decision aids are not being used as intended in interpreted consultations.

Key Words

Interpreted consultations; Shared Decision Making; Patient Decision Aids; Discourse analysis; Health Literacy; Lay / professional interaction.

1 Introduction

Interpreters are a necessity in some medical consultations to enable communication where it would be otherwise impossible. Interpreters have been shown to reduce errors, improve clinical outcomes and increase patient satisfaction in some settings [1, 2]. Whilst their impact on communication processes has been widely studied (see [2-4] for reviews), their influence on attempts to engage patients in shared decision making (SDM) and using decision tools within consultations has received little attention.

There is wide agreement that interpreted consultations are complex. The typical two-way clinician-patient interaction is interrupted, possibly disrupted. Time pressures are intensified [5], mistrust may be heightened, and bilateral concerns about translation veracity and comprehensiveness will often arise; confidentiality may also be questioned if the interpreter is a member of a local community [6]. Patients may expect interpreters to act as advocates; clinicians might expect neutrality. If the interpreter is not adept, power imbalances may be exaggerated and lead to superficial or misinterpreted communication [7].

There is increasing interest in SDM as an approach to patient centered care where patients are informed, and their preferences elicited and integrated in a collaborative process [8, 9]. This is not always easy, particularly in situations where patients expect a particular outcome [10], or where the clinician has a clear preference [11]. In consultations where clinicians and patients come from different cultures, they may not share similar values about health and illness [12]. Nevertheless, there is evidence that, for disadvantaged patients, interventions to promote SDM can significantly improve outcomes [13]. Since patients needing interpreters are often among the most disadvantaged groups, interventions to promote SDM could make an important difference to health outcomes for this group.

There is a significant body of evidence showing that decision aids that have been designed to be given to patients before clinical consultations lead to greater knowledge, better risk perception and, in some clinical situations, more conservative decisions [14]. Another category of patient decision aids exists termed encounter tools. These tools are briefer and are designed for use in consultations, to promote dialogue and the comparison of alternative treatments [15]. There is evidence that these tools also lead to better patient knowledge and to improved dialogue [16, 17], but we have not found research about their use by interpreters.

In this study we use discourse analysis to examine communication processes and challenges between clinicians, patients and interpreters when a patient decision aid is used in consultations.

2 Methods

2.1 Setting

This qualitative study was embedded in a trial designed to evaluate the impact of introducing the Option Grid™ decision aid. Patients with knee osteoarthritis were referred by primary care practitioners to a musculoskeletal clinic for assessment. The assessment was undertaken by one of six clinicians (physiotherapists) in Oldham, Greater Manchester, UK.

2.2 Study Design

Clinicians saw six patients each before receiving training in how to use the Option Grid. Each clinician then used the Option Grid with a further six patients. Further details are available in the protocol [18] and main study results [16]. In this study, we selected those consultations where the clinicians were assisted by a professional interpreter employed through a NHS Interpretation and Translation Service.

2.3 The Osteoarthritis of the Knee Option Grid decision aid

In the trial the Option Grid was found to increase SDM (measured by the Observer OPTION score [19]), and increase patient knowledge [16]. The decision aid provided responses to patients' "frequently asked questions" to describe three treatment options, namely oral analgesia, joint injection, and knee replacement surgery (Appendix 1). After consultation with local agencies, it was decided not to translate the Option Grid from English, given the wide range of languages without written texts, and low literacy levels in that community.

Clinicians received 30 minutes of training in the principles of SDM [16]. The interpreters were shown a copy of the Option Grid before the consultation and had read a brief description of the study but did not receive further training in SDM. We were not able to fully train interpreters as we did not know which interpreter would be present on the day.

2.4 Format of the consultation

Clinicians were asked to explain the Option Grid to the interpreter and encourage them to use the tool to highlight any issues that the patient would like to discuss. The clinician asked the interpreters to read the Option Grid to the patient while they attended to another task, such as fetching MRI scans, in order to allow the interpreter and patient time and space to discuss the grid. When the clinician returned, treatment options were discussed.

2.5 Data Collection

A research nurse present in the room audio-recorded consultations. These were transcribed into English by professional translators following an agreed protocol (Appendix 2) [20]. The quality of the translation was assessed by independent researchers fluent in the relevant language, and refined where necessary. All data were anonymised.

2.6 Analysis

Data were examined using a discourse analysis method. Discourse analysis is concerned with the production and interpretation of language in context, focusing on how speakers attempt to achieve their communicative goals through speech [21]. Discourse analysis has been used in studies of clinician and patient interactions, for example, on topics such as interactional difficulties [22] [23] as well as examining how miscommunication arises in multi-cultural medical encounters [24]. In this study, two researchers (KP and FW) listened to the audio-recordings multiple times while concurrently reading the transcriptions, until immersion was achieved. Comments were independently made on the transcripts, and discussed to achieve consensus. Concurrent reading of the literature on the use of interpreters in clinical settings [1, 5, 6] framed topics for discussion

including interpretation omissions, substitutions, editorializations and additions and also topics such as interpreter roles, power imbalances, and speech that manipulates an outcome. Our analysis also determined more quantitative measures of patient participation including frequency of words spoken by each individual in the consultation, and number of patient-initiated questions.

2.7 Consent and Ethics

A research nurse approached each potential participant for written informed consent. Interpreters were also required to consent to the study. The study had ethics approval from the South East Wales Research Ethics Committee (11/WA/0356).

3. Results

Of thirty-six consultations where an Option Grid was used, three were conducted with an interpreter requiring Italian, Urdu and Bengali translation, and involved three different clinicians. The consultations followed the normal pattern of history-taking, examination, followed by a treatment discussion. The average consultation duration was 27 minutes and 45 seconds compared to an average of 29 minutes 26 seconds for consultations where Option Grids were used without interpreters. The mean OPTION score for patients in the Option Grid group was 37.8 (SD 8.4). In comparison OPTION scores for the three patients requiring an interpreter were 38.5, 30.2, and 34.4 respectively.

3.1 Case 1 82 year old Caucasian female speaking Italian

This woman had arthritic knee pain and was using oral analgesics. In this excerpt, the clinician has finished examining the patient and moves to talk about treatment options. “Now”, in line 109, signals this phase change.

- 109 **Clinician 01 (In English):** Now (...) I would suggest that there are ((2)) three possibilities. Number
110 one is just tablets (.) painkillers, okay? Number two is that we try s:ome exercises, try to loo::sen
111 it up and get it moving (.) erm (.) number three is to have a little injection, a painkiller straight
112 into the joint itself
113 **Interpreter (in Italian):** He thought about three possibilities (.) the first one is only with
114 painkillers, so only tablets (.) The second is that of moving a little, doing a little exercise to help
115 it a little (.) and the third is injecting a syringe of painkiller directly into your knee (.) okay?

The clinician introduces choice into the introductory gambit. Nevertheless, the clinician’s preference is identified through the adverbs used to describe each option. “Just tablets, painkillers” (line 110) suggests that this is a sub-optimal choice. Likewise “try some exercise” (line 110) suggests ambivalence. The phrase “Have a little injection, a painkiller straight into the joint itself” (line 111-112) however sounds plausible and seems a candidate for decreasing pain. The interpreter amplifies these *implied* preferences with “Only with painkillers, so only tablets” (line 113) and “doing a little exercise to help it a little” (line 114). Describing the joint injection is the only decisive option and is pro-actively phrased. The use of language to subtly indicate clinicians’ preference has been noted by other researchers [25], and is prominent here.

- 116 **Patient 33 (In Italian):** Yes

116 **Clinician 01 (In English):** OK. Now (.) normally we would ask people to read through all of the
 117 pros and cons. Okay? Now (.) on here it has surgery (.) and I don't think you should be looking at
 118 that one yet (.) we can think about that (.) if (.) nothing else works
 119 **Interpreter (In Italian):** This is the trial we were talking about previously (.) He said that normally
 120 there are three options (.) one of these is the implant surgery which however is not of our interest
 121 (.) so there is no need for us to look at that possibility
 122 **Patient 33 (In Italian):** At that possibility
 123 **Interpreter (In Italian):** Okay?

The clinician starts by normalising the Option Grid: "Normally, we would ask people to read through all of the pros and cons." He presents it as a tool to *compare* options but it is not presented as a way to engage the patient in decision making. The clinician guides the patient saying that knee replacement is not recommended but might be considered, if necessary, in the future. When this speech is translated, this message is altered. The 'orientation' (or meta-talk) is lost, so the patient is not made aware of the comparison goal and does not receive the explanation that knee replacement might be considered at some future point, and may understand that this has just been refused.

125 **Clinician 01 (in English):** And you tried painkillers?
 126 **Interpreter (in Italian):** You've already tried with painkillers, haven't you?
 127 **Patient 33 (in Italian):** Yes
 128 **Clinician 01 (in English):** Now (...) *if I can just* ((2)) this is where I need your help
 129 **Interpreter:** ((laughs))

In this section the pauses indicate the clinician's hesitancy in how to proceed. Hesitancy is also reflected in "Now, if I can just..." an utterance which is never finished. The clinician is aware that analgesia had limited benefit. During the two second pauses, we see the Option Grid being portrayed as a new tool and there is some discomfort about how to use it (this is the clinician's fourth consultation using the tool):

130 **Clinician 01 (in English):** So probably the easiest thing is just to go through ((2)) this column, which
 131 is basically talking about (...) the possible benefits and risks of having an injection (.) and if you think
 132 that's appropriate then let me know (.) okay?
 133 **Interpreter (in Italian):** He was saying that since you already tried with painkillers and you've not
 134 felt much joy as you're saying that doesn't help you much we'll consider this middle one which
 135 talks about the steroid injection painkillers which are injected directly in your knee (.) Now I'll read
 136 you a few things and then you can tell me whether it's worth trying (.) looking at benefits and risks
 137 (.) okay?
 138 **Patient 33 (in Italian):** Okay

After the explanation in line 130, the clinician becomes more fluent again. Translating the general concept of using the Option Grid to compare options is requested of the interpreter in line 131-132.

139 **Patient 33 (in Italian):** Okay
 140 **Interpreter (in Italian):** I'm going to go through all of these, and then I'll (inaudible)
 141 ((all respondents laugh))
 142 **Clinician 01 (in English):** It's okay (.) normally what I would do is that I'd walk out of the room and
 143 leave you 10 minutes to read it but erm (...)
 144 **Interpreter (in English):** I have seen it before [so...

139 **Clinician 01 (in English):** Oh have] you? Have you worked through this before?
 140 **Interpreter (in English):** No, I've [seen-
 141 **Research Nurse (in English):** We] went through it earlier
 142 **Clinician 01 (in English):** Oh okay
 143 **Interpreter (in English):** Do you want me to go through all of it?
 144 **Clinician 01 (in English):** Ye::ah (.) I would say (...) I'm prepared to work with you with it really but
 145 (.) personally I would say (.) I would just read out the parts for an injection and then tell her that
 146 there is also the physiotherapy and that I can probably fill in what the physiotherapy options are

It has taken many turns to get to the point where the Option Grid could be used, yet the interpreter is still looking for clarification. The meta-talk about how to use the Option Grid decision aid is new for the clinician and there is hesitancy about how to explain this to an interpreter. Translation to the patient appears to focus on which options are appropriate rather than on why use the tool and how they should use it to help their own decisions.

3.2 Case 2 – 67 British Asian woman speaking Urdu

This woman reported 'a little' spoken English. She has knee arthritis and used analgesia. She had no experience of other treatment options. This extract starts when treatment options are declared.

254
 255 **Clinician 02 (in English):** So (.) there's a few options available to us (.) okay?
 256 **Interpreter (in Urdu):** There are a few options for your treatment
 257 **Clinician 02 (in English):** What we'll do is (.) we'll go through what we call this (.) this Grid system
 258 (.) which is ((2)) these are the options available to us (.) okay (.) for your knee
 259 **Interpreter (in Urdu):** This is the treatment that you can have
 260 **Clinician 02 (in English):** There are three sections on it (...) there is painkillers which is what you
 261 are trying now (.) yes [?]
 262 **Interpreter (in Urdu):** Painkillers you are already taking
 263 **Patient 35 (in Urdu):** Yes

The clinician speaks in short sentences allowing the interpreter to translate brief phrases at a time, orientating the interpreter to the tool, using the words "Grid system" and clarifying that this means that there are treatment options available. The interpreter omits all mention of the Option Grid decision aid and orientating meta-talk (line 258).

264 **Clinician 02 (In English):** There are joint injections (.) so injections into the joint [?]
 265 **Interpreter (In Urdu):** There are injections as well (.) these will be steroids injected in your knees
 266 (...) this is the second treatment
 267 **Male relative (in Urdu):** This is the second option?
 268 **Interpreter (In Urdu):** Yes
 269 **Male relative (In Urdu):** One treatment is pain killers (.) second treatment is injections [?]

The patient is accompanied by a male relative who speaks English. His interruption highlights that the interpreter has mentioned a second treatment but not indicated that these treatments are options. It seems that the male relative has understood that the purpose of the Option Grid is to compare options. However, given that the interpreter has omitted to translate the goal of introducing the tool, the patient seems unable to make use of the Option Grid decision aid.

270 **Clinician 02 (in English):** Or (..) the last option is (..) is surgery
 271 **Interpreter (in Urdu):** Third treatment is the knee replacement surgery
 272 **Patient 35 (in Urdu):** I don't want to have the operation (..) I will go with the injections
 273 **Interpreter (in English):** I am not going for the [replacement-
 274 **Clinician 02 (In English):** OK, so she doesn't] want to discuss [about that
 275 **Interpreter (in English):** I'll try the] joint injections.

She has made up her mind and is not waiting for information to help with her preferences.

276 **Clinician 02 (in English):** OK, right >>so what we need to do<< is to just go through (..) um (..) this
 277 u::m (..) just sub headings (..) so will it reduce my pain? Will the treatment help? Are there any
 278 side effects? How long will it take me to feel better? Um (..) Do we need more surgery? So we
 279 need to go through those so that she completely understands all those things (..) Is that okay?
 280 **Interpreter (in Urdu):** You will go through this injection treatment. I have questions that I will
 281 ask you and you will answer me.

The clinician directs the patient back to the Option Grid and instructs the interpreter: "We need to go through those things so that she completely understands all those things." The interpreter does not translate the clinician's request and nothing is clarified for the patient. Instead, the interpreter's speech at lines 280-281 is very directive and it indicates that the patient will be tested on the information she is about to be given. Whereas the clinician had been trying to empower the patient, the interpreter directs the patient, reversing the intention.

282 **Interpreter (In Urdu):** Here it is written that the injections you will take will reduce the pain (..) here it is written that in some people the pain goes down (..) in some people, not all, it helps it (..) Here it is written that if you take the pain killers will it help you in walking and doing other chores (..) it is written that in a month you will feel a lot better and it will feel like the pain is gone and that you can get more advice for the physiotherapy
 287 **Male relative (In Urdu):** With injections [?]
 288 **Interpreter (In Urdu):** Yes with injections (...) it is written that there is a little bit of side effect that when they inject the knee there can be a bit of jamming in the knee or you can have an allergic reaction (..) it doesn't happen too often but it can have an allergic reaction in some people (..) when they will inject in your knee, you will feel some pain for 2-3 days (...) these are the side effect but it will subside after 2-3 days (...) it is written how long will it take for me to feel better [?] it says that in most of the people they feel the difference in one week from the pain (..) here it is written that will I need more surgery [?] when they will inject you (..) it will relieve your pain (..) if the pain comes back they can inject you four times in a year
 296 **Patient 035 (In Urdu):** Okay
 297 **Interpreter (In Urdu):** Here it is written that after they inject people (..) what happens (..) it says that when people are injected then their pain and swelling both subside (..) this is for the injection (..) after that there will be the third treatment
 300 **Male relative (In English):** But we will try the first one (..) the injection [?]

The patient says very little, which is counter to the aim of the Option Grid. Confusion is evident as the male relative tries to clarify what the interpreter means. Insufficient meta-talk has been translated. Information is reframed: “Jamming in the knee” is an interpretation of the following sentence in the Option Grid: *‘There is a small risk of frequent injections causing cartilage damage, especially in weight-bearing joints.’* The interpreter reads without offering pauses for the patient to speak. He indicates that there is also a ‘third’ treatment, surgery, but the patient’s relative interrupts to emphasise that they don’t need to hear about knee replacement. Indeed it would seem that the male relative is driving the decision at this point. When the clinician returns to the room, the interpreter does not indicate that the reading of the Option Grid was truncated or that the patient did not contribute to the comparison of options. For this patient, the Option Grid was not used as a means to facilitate empowerment or participation.

3.3 Case 3 -65 year old British Asian lady who speaks Bangla

This woman reported having very little spoken English. She has used oral analgesia and received joint injections previously for her knee arthritis. In these turns, the clinician outlines the choices he thinks are reasonable, seemingly excluding knee replacement:

- 280 **Clinician 03 (In English):** So ((2)) Actually your knees are quite good really (...) Erm (..) the
 281 GP has done an ultrasound scan but actually erm (..) probably we need to get an x-ray just
 282 to really see what’s going on in that knee (..) erm (..) we do have a few options (..) she’s
 283 certainly not ready for a knee replacement or anything else like that I don’t think for the
 284 minute but (..) the whole point of [name of patient] coming today is to have a look at the
 285 treatment options that are open for her and basically the treat- knee pain is 3 ways (..)
 286 either just conservatively with the painkillers that she’s on and maybe get a physio to give
 287 some exercises (..) we *could* try joint injections again or the third option would be a knee
 288 replacement (..) erm (..) so if I leave you with the (..) erm (..) form, are you okay to go
 289 through that with her [?]
 290 **Interpreter (In English):** Okay
 291 **Clinician03 (In English):** There’s a pen there as well (..) so is there anything that she wants
 292 to ask us about then obviously we can discuss that with her afterwards and then just
 293 really just to see where she thinks she would like to go in terms of treating [this knee-
 294 **Interpreter (In English):** Okay]
 295 **Clinician 03 (In English):** - and what she would like to try next, but I definitely do want to
 296 get an x-ray done as well today [so
 297 **Interpreter (In English):** Today [?]
 298 **Clinician 03 (In English):** Yeah cos I want to get a better idea of it (..) Are you okay with
 299 that [?]

In this example, the clinician seems to encourage the patient to look at all options but subtly shifts from addressing the patient to addressing the interpreter (line 281-282). The clinician gives the interpreter a pen (recommended in training) but does not say what to do with it. This changes the

role of the interpreter to become a mediator rather than interpreter. As a consequence, the interpreter does not explain why choices are available nor the rationale of comparing treatment options. As in the previous two cases, the patient is excluded from the meta-talk and the purpose of the Option Grid remains unexplained.

300 **Interpreter (In English):** Yeah don't worry
301 **Interpreter (In Bangla):** (2) Erm (.) she is saying that the doctor has done a scan of your knee
302 but they want to do an x-ray to understand what the problem is inside (..) but they erm (.) this
303 problem that you have in your knee isn't so bad that you would need an operation to have a
304 knee replacement (..) they can treat this in three ways (..) one is painkillers (..) people control
305 pain with that (.) and then there's physiotherapy where you will be given exercises and shown
306 exercises for the knee (.) many find relief and the pain goes (..) and the other one is an injection
307 (..) erm (...) actually physiotherapy and medicine is together and you can have an injection or
308 you can have a knee replacement surgery (..) these are the three options (.) but here is a form
309 that I'm going to read through (..) you have to make the decision as to what would be good for
310 you (.) what you want (..) I will explain it to you that if there was pain - I will read through
311 everything and you can understand later

The interpreter seems to view the use of the Option Grid as a situation where the patient is left to make a decision on her own: "You have to make the decision", rather than be engaged in a supported process of developing informed preferences.

312 **Clinician 03 (In English):** Okay will you read that through with her then [?] is that alright [?] (2)
313 so the most commonly asked questions (.) there are three sort of ways that we treat knee pain
314 and then anything she feels she might like to discuss a bit further or she is quite interested in
315 doing, then we'll have a discussion about it afterwards
316 **Interpreter (In English):** O::kay
317 **Clinician 03 (In English):** Is that alright [?] I'll give you three minutes if that's okay (6) [clinician
318 leaves room]
319 **Interpreter (In Bangla):** Auntie here are some questions that they ask people like yourself who
320 have pain. Here are erm (.) 1, 2, 3, 4, 5, 6 six questions that are commonly asked (.) after these
321 questions are the answers about the process of treatment (.) one of them is will this, I mean
322 this treatment get rid of my knee pain (.) so one is that, there is medicine (.) for example you're
323 taking co-codamol (.) it does say here that it does depend on the type of medication you're
324 taking (..) ibuprofen works for 50 out of a 100 people.

In this section of meta-talk (312 to 315), there is no obvious implication to translate the comparison intention to the patient. The talk around see what she feels about the options and if she'd like to discuss any further is not translated and the interpreter immediately begins to read. The following exchange occurs after the Option Grid decision aid has been read aloud.

389 **Interpreter (In Bangla):** Do you have any questions about everything I have read out to you?
390 **Patient 63 (In Bangla):** No my dear (.) I've understood (.) it's okay
391 **Interpreter (In English):** No questions [name of research nurse]
392 **Research nurse (In English):** Okay

389 **Interpreter (In English):** ((laughs)) That was more than 3 minutes
 390 **Research nurse (In English):** It's alright, I knew it would. Do you want me to get [name of
 391 clinician?] (Research nurse leaves to find clinician)
 392 **Interpreter (In Bangla):** You will be given a card and then you can have an x-ray done. The x-
 393 ray department is somewhere else, not here. ((13)) (background noise in corridor as door opens
 394 waiting for clinician)
 395 **Clinician 03 (In English):** We will need a bigger room next time
 396 **Interpreter (In English):** I know yeah.
 397 **Clinician 03 (In English):** Hell::o Okay?
 398 **Patient 63 (In English):** Okay
 399 **Interpreter (In English):** We read that and there are no questions

The interpreter felt that reading the Option Grid decision aid aloud was a lot of work, and in due course, the turns come back to a decision point.

404 **Clinician 03 (In English):** Okay, so what does [name of patient] feel that she would like (.) today
 405 in terms of her treatment
 406 **Interpreter (In Bangla):** You know that your knee isn't that bad (.) she said this after she
 407 examined you. What type of treatment would you like (.) what do you think would be good for
 408 you?

An open question (line 404) is mirrored by the interpreter, but presented after an evaluation that the knee problem is 'not so bad'. The patient is not given time to respond to the clear question because the clinician continues.

409 **Clinician 03 (In English):** From examining you today, I think that knee looks pretty good really (.)
 410 obviously she was a bit painful when I really (wound) the knee round and that's because (.) and
 411 I think the ultrasound started to show this that she has started to get wear out of the inside of
 412 the knee, but I don't think it's anything too traumatic yet and as I say to actually examine the
 413 knee it looks pretty good (.) so that is why I am sure we are not looking at the knee
 414 replacement side of things (.) it's just whether (.) she is happy to carry on as she is at the
 415 minute (.) take the pain killers (.) keep active and see how she goes with it or whether she
 416 would like to try something
 417 **Interpreter (In Bangla):** She's saying that when she examined you she found no arthritis in your
 418 knee (.) your knee is actually fine (..) you know when you have some pain that is because inside
 419 it is starting to wear out when one gets older from the rubbing there is wear and tear isn't
 420 there [?] so just like that it's started to wear with you (..) but erm (.) she doesn't think that you
 421 will need a knee replacement (..) your knee hasn't reached that stage yet (..) she's thinking that
 422 would you want to carry on taking medication and be a bit more active take medicine would
 423 you want to stay like that or-
 424 **Patient 63 (In Bangla):** Yes I would
 425 **Interpreter (In Bangla):** Is that how you want-
 426 **Patient 63 (In Bangla):** It's fine like that (.) I don't want an operation.
 427 **Interpreter (In Bangla):** Okay, there are more options for example having injections (..) do you
 428 want that?
 429 **Patient 63 (In Bangla):** I have had injections.
 430 **Interpreter (In Bangla):** Didn't work

409 **Patient 63 (In Bangla):** No (.) I won't have any more injections.
410 **Interpreter (In English):** Don't want erm (..) don't want injections any more (.) just to go ahead
411 with the painkillers.

In this section, the patient seems unable to take a speaking turn to state her preferences. The patient may be frustrated, suggested by the stress indicator under "I have had injections". The clinician continues to refer to the patient as 'she' rather than talking directly to her and the interpreter seems to do more than interpret when saying that the clinician: 'found no arthritis in your knee, your knee is actually fine'. The patient may understand that treatment options exist but is being excluded from the deliberation process.

3.4 Quantitative assessment of patients' participation

The three cases suggest that discussion of treatment options is predominantly between clinician and interpreter. Figure 1 shows the number of words uttered by each individual during discussion of treatment options. Results reflect this observation, with the patient having a startlingly small proportion of speech turns. When the patient does talk, they utter an average of four words, which cannot characterize that they are given opportunities to seek information or express their preferences.

We also performed an analysis on the number of questions initiated by patients during consultations in a larger sample of 24 consultations (including the 3 interpreted cases) from our trial in which Option Grids were used in 12 and not used in 12 of the consultations (see table 1). Overall, patients in the consultations in which Option Grids were used asked more questions than those in usual care consultations. Questions surrounding dilemmas or seeking reassurance, and questions relating to treatment options were categories of particular frequency.

4. Discussion and Conclusion

4.1 Discussion

Our analysis points to the complexity of introducing tools designed to facilitate SDM into clinical consultations: interpreters seem unable to convey meta-talk, and they do not exhibit understanding of principles of shared decision making. Encounter tools are new concepts, and known to be difficult for clinicians [26]. It is not therefore surprising that interpreters seem unable to explain the goal of using the tool, and view it as a source of information to be used didactically. Introducing an

encounter tool designed to empower patients seems to modify the dynamic between clinician, interpreter and patient.

In the examples analysed patients have very brief opportunities for verbal interaction, and this may be a feature of interpreted consultations in general. The effect of the interpreter reading the Option Grid is that the monologue is done at a fast pace preventing patients' participation. The interpreter does not check that the patient has understood or even absorbed the information, far less give opportunities for questions or discussion. In one case a family member was also instrumental in the decision making process, a finding that has been raised in other studies comparing medical consultations with family and trained interpreters [27]. In addition, interpreting competencies will differ between interpreters and poor interpreting competence may result in a more directive delivery of information.

Previous research has also identified the importance of the shifting alliances within the triad which can affect understandings of role responsibilities within the encounter [28]. This might also be influenced by clinicians referring to patients in the third person, as seen in our third case, a communicative practice that has previously been reported [29].

One barrier observed in our study is the lack of agreement about the goal of sharing decisions between clinician, the interpreter and the patient. Interpreters do not to translate 'meta-talk', they translate question-answer patterns, so seem to omit the translation of explanations, particularly the concepts such as shared decision making. Patients received minimal orientation to the Option Grid, and little, if any, explanation of shared decision making and how it is meant to help. Learning to use decision aids within clinical encounters, regardless of whether an interpreter is present, is a skill that takes time to learn [30]. It is also notable that our Observer OPTION scores (a measure of shared decision in consultations) for interpreted consultations were, on average, lower than non-interpreted consultations when Option Grids were used.

Shared decision making is seen as important in improving patient participation and healthcare quality [31, 32], although difficult to achieve in clinical practice [33, 34]. Encounter decision aids offer a way to influence communication processes [16, 17, 31, 35]. As the first study looking at encounter decision aids in interpreted consultations, this does not seem to hold true for interpreted consultations. Although the data show that patients became aware of treatment options, the lack of clear explanation about the goal and didactic use of the tool did not facilitate patient engagement.

Previous research has also highlighted that clinicians can implicitly transform and edit patients' contributions to preference discussions [25] and select language, syntax and other patient stories to

seek to persuade patients to their preferred treatment choice [33]. In this study we see evidence that interpreters also impose their views about treatment preferences by altering what is communicated to the patient and by modifying the patient messages to clinicians.

This in-depth analysis focused on three consultations – we cannot therefore comment on general performance of clinicians and interpreters and these three consultations may not be representative of all consultations where interpreters are present. We do not have data on interpreted consultations when an Option Grid was not used as all three patients in the larger trial requiring an interpreter were randomised to receiving the Option Grid. Our analysis of patient initiated questions from consultations both with and without an Option Grid suggests that Option Grids seem able to facilitate patient engagement. This would suggest that poor levels of involvement in the consultation for the three interpreted cases are more likely to be due to the added level of complexity from the interpreter's presence rather than just the introduction of the Option Grid. During our analysis we examined communication issues that might occur due to the decision aid being used in the consultation, and the clinician being expected to perform SDM skills due to their participation in the study, as well as examining communication issues that arose specifically due to the presence of the interpreter. Both interpreted consultations and consultations in which a decision aid are used are complex, but informed by previous work on non-interpreted consultations [33], our data suggest behaviours such as amplification of the clinician preferences via the interpreter, loss of meta-talk which orientates the patient to the purpose of the grid, and relatives dominating within the consultation can only really be attributable to the added complexity of an interpreter. Behaviours such as clinicians' hesitancy in explaining the purpose of the Option Grid may be more likely to be observed regardless of whether an interpreter is present. An in-depth analysis of consultations where an interpreter is not present would enable us to gain better understanding of how problems in communication during the consultation could be attributed to the presence of the interpreter rather than the Option Grid or the communication style of the clinician. We did not analyse non-verbal communication, which is a limitation given that the tool has a physical presence in the room. While we refer to these recordings as naturally occurring, we acknowledge that having a recording device in the room, accompanied by an observer, may effect the communication processes. We also acknowledge that we were not able to train the interpreters in SDM and the use of grids due to practical reasons of conducting the trial in a clinical setting. This is likely to result in the Option Grid being used in different ways in interpreted consultations and non-interpreted consultations. Had we been able to properly train interpreters we may have found a good level of competence in their use of the tools.

4.2 Conclusions

Introducing a patient decision aid into the complex process that has to be negotiated when an interpreter is required leads to communication challenges. Without a joint understanding of goals, some detailed understanding of the format and how best to use a comparison table, interpreters fall back on a traditional assumption of using such tools as information resources.

Training interpreters to improve on their communication competencies for shared decision making is important, but it would seem more realistic to initially focus training on clinicians and include advice on how shared decision making can be achieved in interpreted consultations. This might include advice to check whether instructions and explanations are translated, as well as question and answer turns.

4.3 Practice Implications

Option Grid decision aids are not being used as intended in interpreted consultations. Interpreters do not have the training required in order to use these tools effectively.

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Appendix 1. The Option Grid™ decision aid for osteoarthritis of the knee.



Osteoarthritis of the knee

This grid is designed to help you and your clinician decide how best to manage your knee pain and activity level. The first steps are to become as fit and close to your ideal weight as possible and to consider having physiotherapy. Surgery is normally recommended only after other treatments have been tried.

Frequently asked questions	Painkillers	Joint injections (steroids)	Knee replacement surgery
Will this reduce the pain I have in my knee?	It depends on which tablets are taken. Tablets like ibuprofen are effective for 50 in every 100 people. Over the counter tablets, like paracetamol, including those that have codeine, are also effective.	Some people get good symptomatic relief after an injection, which may include pain relief and/or reduced swelling.	About 90 in every 100 people who have this operation say it leads to relief of most or all of their pain, over time. 10 in every 100 people say it does not lead to significant pain relief.
Will this treatment help improve which activities I can manage to do?	It may. As you get pain relief, you should be able to be more active and this in turn can also help to reduce pain. It helps to take painkillers before doing physical activity.	Yes, usually for up to a month or so. Plan to be more active as a result of the pain relief. Advice from a physiotherapist may help.	Yes, the majority of patients experience improvement in their activity level. However, not everybody sees differences in their ability to walk or climb stairs.
Are there any risks to this treatment?	As with all medications, pain killers have some side effects. For example, codeine often leads to constipation and prolonged use of anti-inflammatory tablets like ibuprofen increases your risk of stomach bleeding.	There is a small risk of frequent injections causing cartilage damage, especially in weight-bearing joints. Allergic reactions and infections due to joint injections are uncommon. You might feel slight pain at the injection site for a few days.	Wound infection needing treatment occurs in 5 in every 100 people. Blood clots in the leg occur in 2 in every 100 people. The risks from surgery increase if you have other conditions, such as heart or lung disease, are a smoker or are overweight.
How long will it take me to feel better after the treatment?	You may start experiencing pain relief within a few days of when you start taking the medication.	Most people who experience relief feel better within the first week or so after the injection	Pain relief is gradual. You will stay in the hospital for around three to five days. Most people walk unaided after 3 months. Full recovery usually takes between 6 and 12 months.
Will I need to have more treatment or surgery?	If things don't get better, talk to your clinician about other treatment options.	Pain relief lasts for up to a month or so. You can only have up to 4 injections per year.	Most knee replacements can last 15 years, many last longer.
What are the outcomes for people with arthritis who have this treatment?	Many people cope well by using medication, being active, and losing weight. Reducing your pain may help you achieve the benefits of exercise.	Some people have good relief by having injections when swelling and pain cause problems.	Surgery is usually considered after other options have been tried. About 80 in every 100 people are satisfied after having a knee replacement. About 20 in every 100 are not satisfied.

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Evidence document: http://www.optiongrid.org/resources/osteoarthritisoftheknee_evidence.pdf

More information: <http://www.optiongrid.org/about.php>

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Appendix 2. Transcription Protocol - Adapted from Jefferson [20]

Speech	
(())	Use double round brackets to describe actions or give descriptions necessary to understand the transcript, or anonymised information e.g. ((CL001 answers telephone))
()	Words in round brackets indicate transcribers guess if speech is not clear, e.g. (the first thing I'd do)
(unclear 00.00)	The word 'unclear' in round brackets indicates speech is not clear and cannot be guessed. Please insert the time on the recording that this occurs e.g. (unclear 09.32) would indicate an unclear word at 9 minutes and 32 seconds into the recording.
?	If uncertain about who is speaking, use '?:' or, if guessing a speaker's identity, use the guessed participant code, followed by ?, e.g. I?: I guess it's kind of
[text in square brackets]	Overlapping speech
=	a continuous utterance and is used when a speaker's lengthy utterance is broken up arbitrarily for purposes of presentation.
>><<	spoken with speed
Pauses	
(.)	Micro-pause
(..)	Pauses up to one second
(...)	Pauses exceeding one second
((6))	Double round brackets indicates an interval of longer length between speaker turns and an approximation of length in seconds presented in a numerical format
.hhh	Inhalation
hhh	Exhalation
Volume and stress	
CAPITAL LETTERS	Indicate increased volume
word	Indicates decreased volume
◦	lower in volume than surrounding talk
:::	lengthening of a sound
underlining	indicates increase emphasis as in stress
[?]	Question mark in square brackets rising intonation
-	indicates cut-off of prior word or sound

Figure 1. Number of words spoken by each participant in the consultation during discussion of treatment options

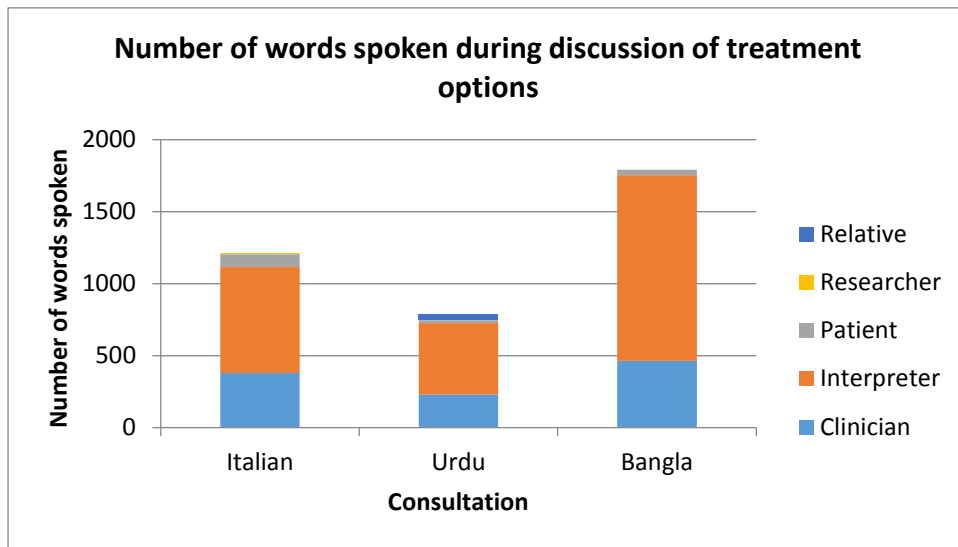


Table 1. Type of Patient Initiated Questions during consultations with and without an Option Grid

Question type	No Option Grid	Option Grid
Checking the diagnosis	18	8
Seeking reassurance / dilemmas with decisions	4	15
Clarifying whether treatments would be given by this specific clinician	4	6
Questions relating to treatment options/ decisions	17	42
Checking what to do with the Option Grid	1	5
Organisational questions – relating to the clinic, etc.	8	11
Total questions	52	87